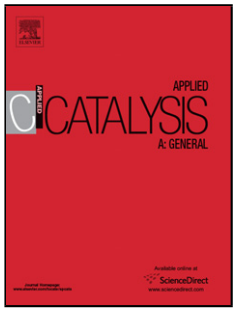

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Highly Selective Production of Olefins from Syngas with Modified ASF Distribution Model

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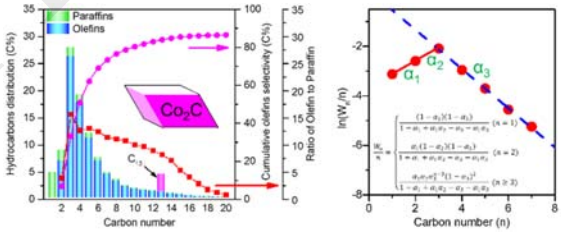
Graphical Abstract



Co_2C nanoprisms benefited for highly selective production of olefins from syngas with modified ASF distribution model.

Highlights

- 1. A negative deviation of CH_4 selectivity from the ideal ASF model was found over Co_2C nanoprisms.
- 2. The products featured a very narrow carbon distribution.
- 3. About 91wt% of the hydrocarbons were in the range of C_2 to C_{12}.